ELSEVIER

Environmental and Experimental Botany 46 (2001) 331–333

Environmental and Experimental Botany

www.elsevier.com/locate/envexpbot

Contents of volume 46

VOLUME 46, ISSUE 1 **AUGUST 2001**

Cambial history of Scots pine trees (*Pinus Sylvestris*) prior and after the Chernobyl accident as encoded in the xylem
M. Tulik (Katowice, Poland) 1

Heat shock, mass-dependent germination, and seed yield as related components of fitness in *Cistus ladanifer*
J. A. Delgado, J. M. Serrano, F. López and F. J. Acosta (Madrid, Spain) 11

Glycine betaine involvement in freezing tolerance and water stress in *Arabidopsis thaliana*
W. Xing (Raleigh, NC, USA) and C. B. Rajashekar (Manhattan, KS, USA) 21

Atmospheric H_2S as sulfur source for *Brassica oleracea*: kinetics of H_2S uptake and activity of O-acetylserine (thiol)lyase as affected by sulfur nutrition
C. E. E. Stuiver and L. J. De Kok (Haren, The Netherlands) 29

Nitrate reductase activity, distribution, and response to nitrate in two contrasting *Phaseolus* species inoculated with *Rhizobium* spp.
J. A. G. Silveira, J. C. S. Matos, V. M. Cecatto, R. A. Viegas and J. T. A. Oliveira (Fortaleza-Ceará, Brazil) 37

Compressive/tensile stresses and lignified cells as resistance components in joints between cladodes of *Opuntia laevis* (Cactaceae): responses to applied stresses
L. S. Evans, Z. Kahn-Jetter, C. Frenz, J. Pancrudo and K. Lagrazon (The Bronx, NY, USA) 47

Root dynamics in an artificially constructed regenerating longleaf pine ecosystem are affected by atmospheric CO_2 enrichment
S. G. Pritchard (Big Spring, TX, USA), M. A. Davis (Auburn, AL, USA), R. J. Mitchell (Newton, GA, USA), S. A. Prior (Auburn, AL, USA), D. L. Boykin (Stoneville, MS, USA), H. H. Rogers and G. B. Runion (Auburn, AL, USA) 55

Aluminum-induced cell death in root-tip cells of barley
J.-w. Pan, M.-y. Zhu and H. Chen (Hangzhou, People's Republic of China) 71

Influence of elevated CO_2 on the sensitivity of two soybean cultivars to sulphur dioxide
S. S. Deepak and M. Agrawal (Varanasi, India) 81

VOLUME 46, ISSUE 2 **OCTOBER 2001**

Activity of stress-related enzymes in the perennial weed leafy spurge (*Euphorbia esula* L.)
D. G. Davis and H. R. Swanson (Fargo, ND, USA) 95

Reduced UV-B in greenhouses decreases white clover response to enhance CO_2
G. Deckmyn, E. Caeyenberghs and R. Ceulemans (Wilrijk, Belgium) 109

Relationship among photosynthesis, ribulose-1,5-bisphosphate carboxylase (Rubisco) and water relations of the subtropical vegetable Chinese broccoli grown in the tropics by manipulation of root-zone temperature
J. He and S. K. Lee (Singapore, Singapore) 119

Effect of foliar spray of nutrient solutions on photosynthesis, dry matter accumulation and yield in seawater-stressed rice
N. Sultana, T. Ikeda and M. A. Kashem (Niigata, Japan) 129

Protein and peroxidase changes in various root-cell fractions of two upland rice cultivars differing in Al tolerance
F. Jan (Tsukuba, Japan), K. Yamashita, H. Matsumoto (Kurashiki, Japan) and M. Maeda (Tsukuba, Japan) 141

CO_2 enrichment of sour orange trees: 13 years and counting
S. B. Idso and B. A. Kimball (Phoenix, AZ, USA) 147

Effects of ozone on biomass, non-structural carbohydrates and nitrogen in spring wheat with artificially manipulated source/sink ratio
J. Gelang, G. Selldén, S. Younis and H. Pleijel (Göteborg, Sweden) 155

Salinity-induced effects on nitrogen assimilation related to growth in cowpea plants
J. A. G. Silveira, A. R. B. Melo, R. A. Viégas and J. T. A. Oliveira (Fortaleza, Brazil) 171

Initial effects of UV-B radiation on stem surfaces of *Stenocereus thurberi* (organ pipe cacti)
L. S. Evans (The Bronx, NY, USA), J. H. Sullivan (College Park, MD, USA) and M. Lim (The Bronx, NY, USA) 181

VOLUME 46, ISSUE 3 **DECEMBER 2001**

PLANTS AND ORGANISMS IN WETLAND ENVIRONMENTS

Editors
S.R. Pezeshki
W.H.O. Ernst
Guest Co-Editor
A. Chabbi

Editorial 191

What is stress to a wetland plant?
M. L. Otte (Dublin, Ireland) 195

Review: plant life in extremely acidic waters
B. Nixdorf (Bad Saarow, Germany), A. Fyson (Bad Saarow, Berlin, Germany) and H. Krumbeck (Bad Saarow, Germany) 203

Effect of pH on the anaerobic microbial cycling of sulfur in mining-impacted freshwater lake sediments
K. Küsel, U. Roth, T. Trinkwalter and S. Peiffer (Bayreuth, Germany) 213

Distributions and adsorption of the methylamines in the inter-tidal sediments of an East Anglian Estuary
M. F. Fitzsimons, B. Kahni-danon and M. Dawitt (London, UK) 225

The role of organic carbon excretion by bulbous rush roots and its turnover and utilization by bacteria under iron plaques in extremely acid sediments
A. Chabbi (Cottbus, Germany), M. E. Hines (Anchorage, AK, USA) and C. Rumpel (Freising-Weihenstephan, Germany) 237

Variation in soil salinity associated with expansion of *Phragmites australis* in salt marshes
D. M. Burdick (Durham, NH, USA), R. Buchsbaum and E. Holt (Wenham, MA, USA) 247

A comparison of physiological indicators of sublethal cadmium stress in wetland plants
I. A. Mendelssohn (Baton Rouge, LA, USA), K. L. McKee (Lafayette, LA, USA) and T. Kong (Baton Rouge, LA, USA) 263

Species and population variation to salinity stress in *Panicum hemitomon*, *Spartina patens*, and *Spartina alterniflora*: morphological and physiological constraints
M. W. Hester (LA, USA), I. A. Mendelssohn (Baton Rouge, LA, USA) and K. L. McKee (Lafayette, LA, USA) 277

Wetland plant responses to soil flooding
S. R. Pezeshki (Memphis, TN, USA) 299

Cumulative Author Index—Volumes 45 and 46 313
Cumulative Subject Index—Volumes 45 and 46 319
Contents of Volume 46 331